Claims

What is claimed is:

1. A computer network architecture comprising:

a first layer including a transmission control protocol connection;

a second layer including a hyper text transfer protocol connection built upon the first layer;

a first tunneling layer including a first tunneling protocol built upon the second layer to tunnel a message through the hyper text transfer protocol connection; and

a multiplexing layer to multiplex a plurality of messages for transmission through the first tunneling layer.

2. The computer network architecture of claim 1, wherein the first tunneling protocol opens the hyper text transfer protocol connection between a server and a client.

3. The computer network architecture of claim 1, further comprising:

a second tunneling layer including a second tunneling protocol built upon the first layer to tunnel a message through the transmission control protocol connection.

4. The computer network architecture of claim 3, wherein the second tunneling protocol is used to open the transmission control protocol connection between the server and the client.

5. The computer network architecture of claim 4, wherein the first tunneling protocol opens the hyper text transfer protocol connection if the second tunneling protocol is not successful in opening the transmission control protocol connection.

6. The computer network of claim 1, wherein the messages include binary format messages.

7. The computer network architecture of claim 1, wherein the plurality of messages includes a plurality of operational messages and a plurality of administrative messages.

8. The computer network architecture of claim 7, wherein the operational messages include operational data.

9. The computer network architecture of claim 7, wherein the administrative messages can be selected from the group consisting of debug messages, firmware update messages and parameter configuration messages.

10. A method for a computer network architecture comprising:

building a hyper text transfer protocol connection upon a transmission control protocol connection;

tunneling a message through the hyper text transfer protocol connection by using a first tunneling protocol layer including a first tunneling protocol; and

multiplexing a plurality of messages for transmission through the hyper text transfer protocol connection by using a multiplexing layer.

11. The method of claim 10, wherein opening the hyper text transfer protocol connection between a server and a client by using the first tunneling layer.

12. The method of claim 10, further comprising:

tunneling a message through the transmission control protocol connection by using a second tunneling protocol layer including a second tunneling protocol built upon the transmission control protocol connection.

13. The method of claim 12, wherein opening the transmission control protocol connection between a server and a client by using the second tunneling protocol.

14. The method of claim 13, wherein opening the hyper text transfer protocol connection by using the first tunneling protocol if the transmission control protocol connection is not successfully opened by using the second tunneling protocol.

15. The method of claim 10, wherein the messages include binary format messages.

16. The method of claim 10, wherein the plurality of messages include a plurality of operational messages and a plurality of administrative messages.

17. The method of claim 16, wherein the operational messages include operational data.

18. The method of claim 16, wherein the administrative messages can be selected from the group consisting of debug messages, firmware update messages and parameter configuration messages.

19. A computer readable medium having instructions which, when executed by a processing system, cause the system to perform a method comprising:

building a hyper text transfer protocol connection upon a transmission control protocol connection;

tunneling a message through the Hyper Text Transfer Protocol connection by using a first tunneling protocol layer including a first tunneling protocol; and

multiplexing a plurality of messages for transmission through the Hyper Text Transfer Protocol connection by using a multiplexing layer.

20. The medium of claim 19, wherein opening the Hyper Text Transfer Protocol connection between a server and a client by using the first tunneling layer.

21. The medium of claim 19, further comprising:

tunneling a message through the transmission control protocol connection by using a second tunneling protocol layer including a second tunneling protocol built upon the Transmission Control Protocol Connection.

22. The medium of claim 21, wherein opening the Transmission Control Protocol connection between a server and a client by using the second tunneling protocol.

23. The medium of claim 22, wherein opening the Hyper Text Transfer Protocol connection by using the first tunneling protocol if the Transmission Control Protocol connection is not successfully opened by using the second tunneling protocol.

24. The medium of claim 19, wherein the messages include binary format messages.

25. The medium of claim 19, wherein the plurality of messages include a plurality of operational messages and a plurality of administrative messages.

26. The medium of claim 25, wherein the operational messages include operational data.

27. The medium of claim 25, wherein the administrative messages can be selected from the group consisting of debug messages, firmware update messages and parameter configuration messages.